

### **REMARKS**

The following remarks are responsive to the final rejection in the Office Action dated October 15, 2008.

#### ***Status of the claims***

The pending claims are 15 and 22-32. Claims 15 and 22-32 stand rejected.

#### ***Amendments to the Claims***

Claims 15, 22 and 23 are amended to advance the prosecution by more particularly reciting that the liquid medium is for depositing an active material onto a surface. New claims 33-38 are being added; these claims are believed to be within the scope of the pending claims, so that no search is required. The new claims are supported by the specification, inter alia, at page 3, lines 28-36. No new matter is introduced.

#### ***Claim Objections***

Claims 23 and 30-32 are objected to under 37 C.F.R. § 1.75 as being a substantial duplicate of claims 15 and 24-26. Applicants respectfully traverse these objections. Claim 15 and its dependent claims recite a liquid medium having the disclosed structure wherein R is C<sub>1</sub> to C<sub>10</sub> alkyl, alkoxy or oxyalkyl, and X, in addition to those three options, may also be H, F, Cl, Br, or C<sub>1</sub> to C<sub>10</sub> fluorinated alkenyl, oxyalkyl, or oxyalkenyl. In claim 23 and its dependent claims, R and X are each, independently, C<sub>1</sub> to C<sub>10</sub> alkyl, alkoxy or oxyalkyl. Therefore, the range of options for X varies between the two claims (15 and 23) as does the range of combinations of substitution patterns for R and X. The applicable rule is 37 C.F.R. § 1.75(b) which states that “[m]ore than one claim may be presented provided they differ substantially from each other and are not unduly multiplied.” Applicants respectfully submit that these standards have been met by claims 15 and 23 and their respective dependent claims. The embodiment recited in claim 15 is set forth on page 14, lines 18-31. The embodiment recited in claim 23 is given as an alternative embodiment at page 14, lines 32-33; see also page 4, lines 3-6. Accordingly, claims 15 and 23 are substantially different and not unduly duplicative. Applicants respectfully request that these objections be withdrawn.

***Claim Rejections - 35 U.S.C. § 103***

**Functional Terminology Should be Considered in Weighing Nonobviousness Against References**

The Office Action alleges that the functional terminology, “for depositing an active material on to a surface” is given no patentable weight, and goes on to say that unless the functional language “results in a structural difference between the claimed invention and the prior art” the functional language does not patentably distinguish the claimed subject matter over the prior art. Applicants respectfully traverse this formulation and respectfully assert that the rule is neither this narrow nor properly stated in precisely this terminology. The statement of the general rule as given in the Office Action may be correctly applied to means-plus-function elements in claims, but the functional language in the claims under examination are not means-plus-function elements. See MPEP § 2114.

Rather, MPEP § 2173.05(g) is on point. This portion of the MPEP states that the Examiner is required to consider a claim element or limitation stated in functional terms and give such element or limitation the same consideration as would be given to an element stated in any other terminology:

“A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step. >In *Innova/Pure Water Inc. v. Safari Water Filtration Sys. Inc.*, 381 F.3d 1111, 1117-20, 72 USPQ2d 1001, 1006-08 (Fed. Cir. 2004), the court noted that the claim term “operatively connected” is “a general descriptive claim term frequently used in patent drafting to reflect a functional relationship between claimed components,” that is, the term “means the claimed components must be connected in a way to perform a designated function.” “In the absence of modifiers, general descriptive terms are typically construed as having their full meaning.” *Id.* at 1118, 72 USPQ2d at 1006. In the patent claim at issue, “subject to any clear and unmistakable disavowal of claim scope, the term ‘operatively connected’ takes the full breath of its ordinary meaning, i.e., ‘said tube [is] operatively connected to said cap’ when the tube and cap are arranged in a manner capable of performing the function of filtering.” *Id.* at 1120, 72 USPQ2d at 1008.<”

In a case recited in the MPEP, the CCPA held:

“It was held that the limitation used to define a radical on a chemical compound as ‘incapable of forming a dye with said oxidizing developing agent’ although functional,

was perfectly acceptable because it set definite boundaries on the patent protection sought. *In re Barr*, 444 F.2d 588, 170 USPQ 33 (CCPA 1971).”

There is ample authority establishing that functional limitations are appropriate in claims and should be considered and afforded patentable weight by Examiner in considering whether a reference renders obvious the claims under review. Functional limitations are to be given patentable weight even if the functional limitations are the only limitations that distinguish claims under review over the prior art. In the present case, there has been no rejection of the functional language under 35 U.S.C. § 112. Applicants respectfully submit that the functional language in the claims under review (i) is an appropriate limitation in that it sets boundaries on the patent protection sought, (ii) the boundaries are definite, and (iii) the limitation would be accessible to and understood by one with skill in the pertinent art. In other words, the functional limitation in the present claims is that the composition is useful for depositing an active material onto a surface.

For these reasons, Applicants respectfully submit that the functional terminology is proper and appropriate, that there is imparted patentable distinction over the prior art, and that the functional terminology should be considered and given patentable weight.

Claims 15 and 22-32 Are Not Obvious Over Spreitzer

Claims 15 and 22-32 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious under 35 U.S.C. § 103(a) over Spreitzer et al. (WO 02/072714 as evidence by US 6,994,893). Spreitzer relates to solutions and/or dispersions of organic semiconductors in a solvent mixture having at least two organic solvents, characterized in that the solvents must have a certain range of boiling points and at least one must have a melting point of 15° C or less, the solvents must not have benzylic CH<sub>2</sub> or CH groups, and the solvents must not be benzene derivatives having t-butyl substituents or more than two methyl substituents. Abstract, claim 1.

To establish a *prima facie* case of obviousness, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007). Moreover, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The reason to make the claimed combination, and a reasonable expectation of success, must be found elsewhere than in

Applicants disclosure, such as in the prior art, the nature of the problem to be solved, or in the knowledge/understanding of the person of ordinary skill in the art. MPEP § 2143; *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Thus, the applicant's disclosure may not be used as a blueprint from which to construct an obviousness rejection. Furthermore, according to MPEP § 2141.02, "[i]n determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." Applicants submit that the instant rejection does not meet these requirements.

Spreitzer manipulates boiling point ranges to arrive at solutions and dispersions that thicken and gel "very quickly" (Col. 11, 55-57) and to this end, select solvents that, on their own, have low, intermediate and high boiling points. Thus, for example, the solution may have one or more solvents having a boiling point above 140° C and one or more solvents having a boiling point below 1400° C (*sic.*) (Col. 11, lines 31-54). Where three solvents are used in an advantageous embodiment (Col. 12, lines 59-63), solvent A should have a comparatively low boiling point (100-150° C), solvent B an intermediate boiling point (130-180° C), and solvent C a high boiling point (170 to < 200° C). Spreitzer does not teach the claimed compositions, nor does Spreitzer teach the selection of liquid media that, in combination with an active material, will produce a composition having a static contact angle of less than 40°. In addition, some of the limitations recited in connection with, for example, the Abstract and claim 1, teach against embodiments of the present claims (no benzylic CH<sub>2</sub> or CH groups, no more than two methyl groups, etc.)

Withdrawal of the rejections is respectfully requested.

#### ***Nonstatutory Double Patenting***

Claims 15 and 22-32 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting over claims 10-13 and 15 of copending Application No. 10/669,404. Because the scope of any allowed claims in either this application or the copending application is not known at present, Applicants request that this rejection be deferred until after allowable subject matter in one of the copending applications is determined.

Application No.: 10/669,403  
Docket No.: UC0315USNA

**CONCLUSION**

Applicants submit that a full and complete response to the outstanding Office Action has been presented in this paper. Should there be any questions about the content of this paper or the status of the application, the Examiner is invited to call the undersigned at the telephone number listed below.

Respectfully submitted,

/JOHN H. LAMMING/

**John H. Lamming**  
Corporate Counsel  
E. I. du Pont de Nemours and Company  
Registration No.: 34,857  
Telephone: (302) 992-5877

Dated: December 15, 2008